MAT Asphalt, LLC

Mr. Raymond Pilapil
~~Acting~~ Permit Section Manager
Division of Air Pollution Control
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P. O. Box 19506
Springfield, Illinois 62794-9506

Dear Mr. Pilapil:

Re: FESOP Application Second Revision
MAT Asphalt LLC
4450 South Morgan
Chicago, Illinois (Facility)
ID #031600QKI, Application #19020007

This letter is to update in the Federally Enforceable State Operating Permit (FESOP) application for the Drum Mix Asphalt Plant, submitted to the Illinois Environmental Protection Agency (IEPA) on February 7, 2019. Please accept this as an update to FESOP Application #19020007.

Exhibit 391-1.2 has been revised to reflect paving of all roads in the plant, including plant haul roads. Attached is the revised Exhibit 391-1.2 and revised Table 1.

Also attached is the revised Operating Program for Fugitive Particulate Matter Control. This document was revised to reflect all roads in the plant being paved and the handling of baghouse fines. We request that the revised Operating Program for Fugitive Particulate Matter Control replace FESOP application Exhibit 391-2, starting at page 3 of the Exhibit.

If you have any questions concerning this FESOP revision, please contact Charlie Gjersvik, with GHD, at 217-717-9007.

Yours truly,

Joe Haughey
MAT ASPHALT LLC

Enclosures:
Revised Exhibit 391-1.2 and Revised Table 1
Revised Exhibit 391-2

Exhibit 391-1.2 (Revised 06-13-2019)

Paved Plant Haul Road Traffic Fugitive Emission Calculations
Drum Mix Asphalt Plant FESOP Application
MAT Asphalt, LLC

Emission Source	Average Vehicle Weight (W)	Total Miles Traveled (VMT)	Uncontrolled Emission Factors[1]		Emissions	
					Uncontrolled	Controlled
	(ton)	(mi/yr)	(lb/VMT)		(ton/yr)	
Paved Plant Haul Road Traffic	26.00	6,846	PM	2.07	7.09	6.53
			PM_{10}	0.41	1.42	1.31
			$PM_{2.5}$	0.10	0.35	0.32

[1]Emission factors calculated following Equation 1 of AP-42 Section 13.2.1.3, as demonstrated below.

$$E\left(\frac{lb}{VMT}\right) = k * (sL)^{0.91} * (W)^{1.02}$$

k = Constant (lb/VMT)
sL = Silt Loading Value (g/m^2)
a = Dimensionless Constant
W = Mean Vehicle Weight (ton) = (20 tons/empty truck + 45 tons/full truck)/2 = 32.5 tons
b = Dimensionless Constant

VMT Calculation

Parameter	Loaders		Units
	To Piles	To Bins	
Mean Weight Per Load:	13		tons/load
Weight In/Out Annually:	890,000	890,000	tons/yr
Total Loads:	68,462	68,462	load/yr
Distance Load:	0.05	0.05	mi/load produced
Total Loadout Distance:	6,846		mi/yr

Emission Factor Determination

Pollutant	Parameter	
	k	sL
PM	0.011	8.2
PM_{10}	0.0022	
$PM_{2.5}$	0.00054	

Material	Load Size		Weight (ton)		% of Traffic	W
	Value	Units	Empty	Full		(tons)
Asphalt	13	tons	19.50	32.50	66.10%	26.00
Aggregate	13	tons	19.50	32.50	33.90%	

Table 1 (Revised 06-13-2019)

Summary of Emissions
Drum Mix Asphalt Plant FESOP Application
MAT Asphalt, LLC

Emission Source Type	Emission Source	Throughput				Annual Emission					
						NOx	CO	PM	PM_{10}	SO_2	VOM
		Material	(unit/mo)	(unit/yr)	(unit)	(ton/yr)					
Non-Fugitive	Crush Plant	Aggregate & RAP	55,000	425,000	tons	--	--	5.87	2.05	--	--
	Drum	Aggregate	148,333	890,000	tons	24.48	57.85	14.69	10.24	25.81	14.24
	Truck Loadout	Asphalt Product	148,333	890,000	tons	--	0.60	0.23	0.23	--	1.85
	Silo Filling	Asphalt Product	148,333	890,000	tons	--	0.53	0.26	0.26	--	5.43
	AC Storage Tanks	Asphalt Cement	-	10,000,000	gallons	--	--	--	--	--	0.10
	Other Tanks	Diesel / Gasoline	-	200,000 / 50,000	gallons	--	--	--	--	--	2.90
					Non-Fugitive Emission Totals:	24.48	58.98	21.04	12.78	25.81	24.52
Fugitive	Paved Roadways	--	--	--	--	--	--	69.91	13.98	--	--
	Storage Piles	--	--	--	--	--	--	1.91	0.90	--	--
					Non-Fugitive Emission Totals:	--	--	71.82	14.89	--	--
					Facility Totals:	24.48	58.98	92.87	27.67	25.81	24.52

1.0 Overview

This document constitutes the Operating Program for Fugitive Particulate Matter Control for the MAT Asphalt, LLC facility located at 2033 West Pershing Avenue, Chicago, Illinois. This document is designed such that it complies with the regulatory requirements of 35 IAC 212.309, 35 IAC 212.310, and 35 IAC 212.312. Pursuant to 35 IAC 212.309(a), fugitive emissions from storage piles, conveyor loading operations, traffic areas, screening operations, materials collected by pollution control equipment, and any units for which spraying or choke-feeding is required must be operated under the provisions of an operating program.

This Operating Program is designed to minimize the opportunity for fugitive PM emissions at the Facility to leave the property. This Operating Program has been prepared to reflect the fugitive PM emission sources currently in operation as of September 2018 and will be revised as appropriate to reflect any future changes in operations.

2.0 General Source Information

2.1: 35 IAC 212.310(a) - Name and Address of the Source

MAT Asphalt, LLC
2033 West Pershing Avenue
Chicago, Illinois 60609

2.2: 35 IAC 212.310(b) - Owner or Operator Responsible for Execution of the Operating Program Joe Haughey

The Plant Manager/Joe Haughey (or their designee) is responsible for inspection and maintenance tasks for the Facility, and for ensuring that all procedures outlined in this Operating Program are enacted.

2.3: 35 IAC 212.310(c) - Map or Diagram of the Source

A map of the Facility showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and normal traffic patterns within the source is provided in Appendix A to this Operating Program.

2.4: Source Description

MAT Asphalt, LLC conducts asphalt production, material processing, material storage and material and product transport operations at the Facility. Various materials including, but not limited to, asphalt, aggregate, asphalt shingles, and recycled asphalt pavement are loaded and unloaded via truck at the Facility.

3.0 BEST MANAGEMENT PRACTICES FOR FUGITIVE DUST CONTROL

3.1: Property Lines

Monitoring: Fugitive dust observations will be conducted on each Property Line of the plant at least once per day.

3.2: Storage Piles

Primary Method of Fugitive Dust Control: Sprayed by water truck as needed when average moisture is $\leq$1.5% or visible fugitive dust is observed.
Secondary Method of Fugitive Dust Control: If water truck is unavailable due to repairs, water will be applied via hoses.
Requirements: Maintain average 1.5% moisture content in materials handled and processed.
Monitoring: Fugitive dust observations will be conducted on each storage piles at least once per day. Moisture Content is measured at least once per day.

The Facility has outdoor storage piles of various materials. Unloading/loading water application will be utilized based on visual observations as determined by site personnel and documented in the MAT Fugitive Dust Log. These measures will not be utilized during periods when no visual emissions are observed, storage piles maintain or exceed 1.5% moisture content as measured daily by MAT personnel via Humboldt brand Aggrameter https://www.humboldtmfg.com/trident-moisture-probe.html or if accumulated rainfall of at least 0.25" in the past 24 hours, storage piles are frozen or covered in snow, or temperatures are below 32C.

3.3: Crushing, Screening, and Conveying of materials

Primary Method of Fugitive Dust Control: The Facility has outdoor crushing (with application of water to the crushing hopper via a spray bar).
Secondary Method of Fugitive Dust Control: If the spay bar is unavailable due to repairs, water will be applied via hoses as needed and determined by visual opservations.
Requirements: Maintain 1.5% moisture content in materials handled and processed.
Monitoring: Fugitive dust observations will be conducted on each process at least once per day.

The Facility has outdoor crushing (with application of water to the crushing hopper via a spray bar), screening, and conveying various materials. Additional water application will be utilized based on measured moisture content and fugitive dust observations as determined by site personnel and documented within the records.

3.4: Front-end Loader Material Transfer

Fugitive Dust Control: Material is maintained to a minimum 1.5% moisture content.
Requirements: Maintain 1.5% moisture content in materials handled and processed.
Monitoring Requirement: Fugitive dust observations during material transfers at least once per day.

When using a front end loader or similar equipment to either load or unload materials, water spray is used, to control fugitive dust based on visual observations determined by site personnel and documented in the MAT Fugitive Dust Log.

3.5: Roadways

Primary Method of Fugitive Dust Control: When in production sweeper is used on paved roadways at least once per week, except if rainfall of 0.1 inch has occurred within the last 24 hours. As required based on fugitive dust observations, water truck will apply water on unpaved surfaces at least once per day. An on-site speed limit of 10 MPH is posted and enforced on all plant roads.
Secondary Method of Fugitive Dust Control: If Sweeper is unavailable due to repairs, water will be applied via water truck at least once per week.
Applicable Regulations: 35 IAC 212.306
Monitoring: Fugitive dust observations will be performed on each leg of roadways within the plant, entrance to the plant, and exit of the plant at least once daily.

3.6: Baghouse

Course particulates removed by the baghouse are transferred via an enclosed auger to either the mixing drum RAP inlet and blended with aggregate and recycled product in the mixing drum. Fine particulates are transferred to an enclosed silo to be incorporated into the mixing drum via an enclosed auger.

4.0: Recordkeeping and Reporting

4.1: Recordkeeping:

Records shall be maintained on site in written or electronic form. The MAT Plant is equipped with electronic daily reports containing the all required data input as dictated below "Records of Fugitive Dust Observation Logs"

4.1.1: Records of Fugitive Dust Observation Logs shall contain the following information:

- Observer's Name
- Weather conditions
- Wind speed and direction
- Time of observation
- Area or operation observed
- A determination if dust was observed
- Corrective Actions taken if visible emissions were observed

4.1.2: Sweeping and Watering Logs:

- Observer's Name
- Weather conditions
- Wind speed and direction
- Time of treatment
- Area or operation treated
- Type of treatment conducted

4.1.3: Retention of Records

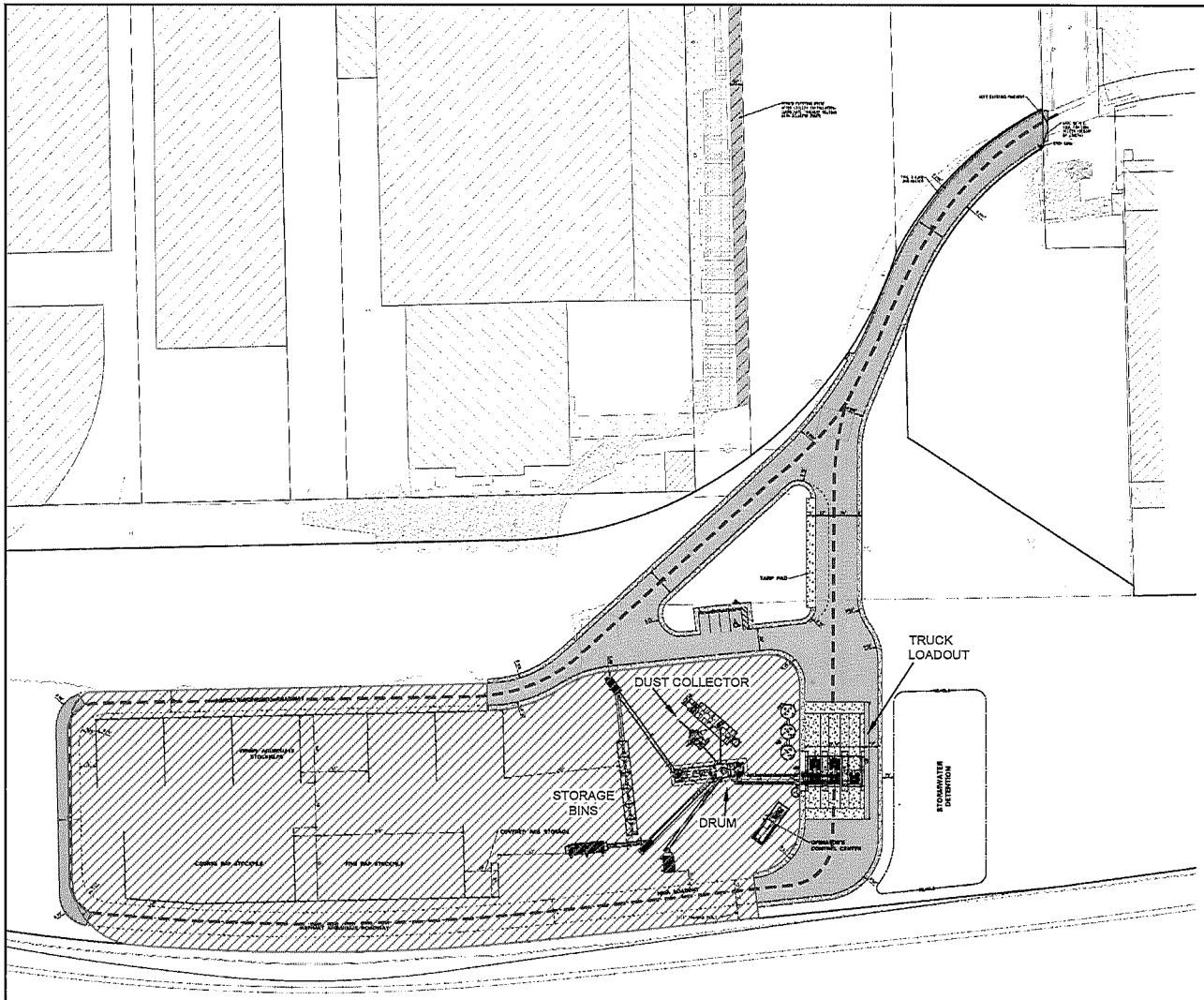
These records will be maintained in accordance with Permits issued by the Illinois EPA These records will be available for inspection and copying by Agency representatives during normal working hours.

4.2: REPORTING

MAT Asphalt will notify the Illinois EPA of any deviations from this plan in accordance with permits issued by the Illinois EPA.

5.0: Amendments or Revisions to this Operating Program

In accordance with 35 IAC 212.312, all portions of this operating program related to the state fugitive dust rules contained in 35 IAC 212 will be updated as necessary to reflect changes in operations or procedures at the Facility. If this plan is revised, MAT Asphalt will submit a copy of the revised plan to the Illinois EPA.



LEGEND

- ON-SITE PAVEMENT
- PAVEMENT RESTORATION (2" MILL & OVERLAY)
- PAVEMENT PATCH (CITY SECTION)
- CONCRETE PAVEMENT OR APRON
- CONCRETE SIDEWALK
- AGGREGATE SHOULDER
- CONCRETE SIDEWALK HC RAMP (5' WIDE UNLESS NOTED)
- REVERSE PITCH CURB & GUTTER
- STANDARD PITCH CURB & GUTTER
- DEPRESSED CURB & GUTTER
- AGGREGATE HMA TRUCK NORMAL TRAFFIC
- STORAGE PILES (END LOADER OPERATION)
- UNPAVED AREA

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Unpaved areas will be paved.

NOTES:

1. ALL DIMENSIONS ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
2. ALL CURBS AND GUTTERS ARE STANDARD PITCH UNLESS OTHERWISE NOTED.
3. SEE SHEET C100 FOR PAVEMENT SECTION DETAILS.
4. ALL ON-SITE PAVEMENT MARKINGS SHALL BE PAINT.
5. ALL ACCESSIBLE PARKING SPACE SIGNAGE SHALL CONFORM TO CITY OF CHICAGO ACCESSIBILITY CODE.
6. SEE DRAWINGS BY OTHERS FOR DESIGN AND DETAILS OF THE BUILDINGS AND ASPHALT PLANT EQUIPMENT.
7. ALL PAVEMENT MARKINGS WITHIN PUBLIC RIGHT-OF-WAY SHALL BE THERMOPLASTIC. CONTRACTOR SHALL RESTORE ALL PAVEMENT STRIPING DISTURBED BY PAVEMENT RESURFACING LIMITS IN THE PUBLIC RIGHT OF WAY.
8. PAVEMENT RESURFACING LIMITS ARE APPROXIMATE AND SHALL BE FIELD CONFIRMED/VERIFIED WITH CDOT INSPECTOR.

Source: SPACECO, INC. CONSULTING ENGINEERS

0 75 150ft

MAT ASPHALT CORPORATION
2055 W PERSHING ROAD
CHICAGO, ILLINOIS

HOT MIX ASPHALT PLANT CONSTRUCTION SITE PLAN

11140803-01

Aug 29, 2018

Revised 6-13-2019

Appendix A

CAD File: I:\drawings\11140000s\11140803\11140803-REPORT\11140803-01(001)\11140803-01(001)GN\11140803-01(001)GN-DE003.dwg

MAT FUGITIVE DUST LOG

Date: _____

Description of Activity	Performed by & Times(s) of Day	Moisture Content Test (If applicable)	Weather	Wind Speed & Direction	Result & Corrective Action
Example: Fugitive dust observations of property lines	Joe Haughey 7:15 AM	NA	53° Clouds	10 MPH NE	Clear no dust No debris
Fugitive dust observations of property lines.					
Fugitive dust observations of storage piles.					
Storage pile moisture content (1.5% minimum).					
Fugitive dust observations of crushing and screening observations.					
RAP pile moisture content (1.5% minimum).					
Fugitive dust observations of roadway (1.5% minimum).					
Fugitive dust observations off front end loader movements (min once per day).					

Sweeping and Watering Log

Description of Activity	Performed by & Times(s) of Day	Weather	Wind Speed & Direction	Area Treated	Type of Treatment